

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4 (Cancelled)

5. (Previously Presented) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine comprising:

a permanent magnet type dynamo-electric machine, said permanent type magnet type dynamo-electric machine having a stator having a stator iron core around which a stator coil is wound, and a rotor arranged in said stator and separated therefrom by a rotational gap, said rotor having a plurality of permanent magnets arranged and fixed within a rotor iron core in a peripheral direction, and having auxiliary protruding poles;

said dynamo-electric machine and an engine being connected to a drive shaft in series; and

without a switching gear between forward and backward movements being provided; wherein,

whereby a shape of said motor in a circumferential direction at each pole is nonsymmetrical so that a ratio between a maximum torque output by said dynamo-electric machine when the electric vehicle moves forward and a torque output by the dynamo-electric machine when reverse moving establishes a

relation 1 : 1.05-1.2, whereby the torque at the reverse moving becomes greater;
and

a permanent magnet inserting hole provided within said rotor iron core is situated at a predetermined inclined angle (θ) with respect to said circumferential direction so that a distance from the rotational gap is greater in the normal rotation side of the dynamo-electric machine than in the reverse rotation side, and said permanent magnet is inserted in said inserting hole.

6. (Cancelled)

7. (Currently Amended) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein said inclined angle is 10 to 45 degrees (~~mechanical angle~~).

8. (Cancelled)

9. (Previously Presented) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein a cross sectional shape in a rotational direction of said permanent magnet inserting hole and said permanent magnet is a rectangular shape.

10-12 (Cancelled)

13. (Previously Presented) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claimed 5, wherein a cross sectional shape in a rotational direction of said permanent magnet inserting hole and said permanent magnet is an arc shape.

14-16 (Cancelled)

17. (Previously Presented) A hybrid electric vehicle employing a permanent magnet type dynamo-electric machine as claimed in claim 5, wherein a ratio between a width in a rotational direction of the permanent magnet inserting hole provided within said rotor iron core and a width in a rotational direction of said permanent magnet is 1:0.5-0.9.